



MID-ATLANTIC REGION



CDC's AR Lab Network closes the gap between local capabilities and the data needed to combat AR in healthcare and the community.

The Antibiotic Resistance Laboratory Network

- The AR Lab Network provides gold standard methods and diagnostics in all 50 states, 5 large cities, and Puerto Rico, and includes 7 regional labs with expanded capacities.
- Testing in The AR Lab Network complements CDC's Containment Strategy, helping the nation identify and respond to unusual resistance and help keep new threats from spreading.

Healthcare Associated Infections and Multidrug Resistant Organisms

- Carbapenem-resistant infections are considered urgent threats to patient safety.
- Public health labs in the AR Lab Network test carbapenemresistant Enterobacteriaceae (CRE) and carbapenem-resistant Pseudomonas aeruginosa (CRPA) isolates to identify the type of bacteria, characterize antibiotic resistance, and detect the presence of carbapenemase genes (often mobile DNA elements that make bacteria resistant to carbapenems).
- In 2018, the AR Lab Network tested 14,566 CRE and 10,561 CRPA isolates. At least one of the five most concerning carbapenemases were found in 40% of CRE and 3.5% of CRPA.
- In 2018, the AR Lab Network reported 2,245 specimens with resistance profiles that required immediate public health responses.

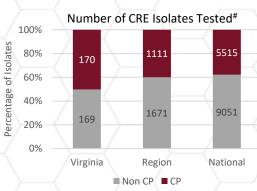
Additional Resources

network-testing-details.html

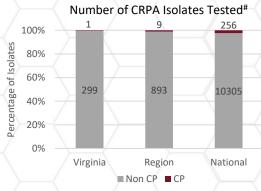
- AR Lab Network: https://www.cdc.gov/drugresistance/laboratories/AR-lab-
- CDC's Containment Strategy: https://www.cdc.gov/hai/containment/guidelines.html
- DCLS CRE and CRPA Isolate Submission Instructions:
 https://dgs.virginia.gov/globalassets/business-units/dcls/documents/hot-topic-and-updates/carbapenem-resistant-enterobacteriaceae-cre-and-pseudomonas-aeruginosa-crpa-testing-instructions-23546-2-1.pdf
- VDH Carbapenem Resistant Organisms Website: http://www.vdh.virginia.gov/surveillance-and-investigation/hai/organisms/carbapenem-resistant-organisms-cro/

CRE and CRPA Isolate Testing, 2018*

Virginia CRE isolates tested: 339 Virginia % CP&-CRE: 50%



Virginia CRPA isolates tested: 300 Virginia % CP&-CRPA: 0%



*As of May 2019; data subject to change &CP is defined as PCR-positive for at least one of the carbapenemase genes tested

DCLS and VDH would like to thank Virginia healthcare professionals and laboratorians for their continuing efforts to contain antibiotic resistant threats. By working together, we are making strides to identify resistant organisms, control the spread, and protect patients across all healthcare settings.